



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**

REGION I  
5 POST OFFICE SQUARE, SUITE 100  
BOSTON, MASSACHUSETTS 02109-3912

**CERTIFIED MAIL - RETURN RECEIPT REQUESTED**

**JAN 26 2012**

Mr. John Arciprete  
Director of Facilities and Operations  
Harvard University  
Department of Environmental Health, Safety and Emergency Management  
46 Blackstone Street  
Cambridge, Massachusetts 02139

Re: PCB Cleanup and Disposal Approval under 40 CFR §§ 761.61(a) and (c)  
and § 761.79(h)  
Pound Hall Partial Demolition Project/Cambridge, Massachusetts

Dear Mr. Arciprete:

This is in response to the President and Fellows of Harvard College (Harvard) Notification<sup>1</sup> for approval of a proposed PCB cleanup at its building known as Pound Hall and located at 1563 Massachusetts Avenue in Cambridge Massachusetts (the Site). Specifically, the Site has PCB caulk that exceeds the allowable PCB levels under the federal PCB regulations at 40 CFR § 761.20 and § 761.62. PCBs concentrations have also been identified in adjacent building surfaces which exceed the allowable PCB levels for unrestricted use under 40 CFR § 761.61(a).

Harvard has requested an approval to address the PCB contamination at the Site under 40 CFR §§ 761.61(a) and (c). Harvard is proposing the following activities under this project:

- Remove and dispose of certain interior and exterior caulk (approximately 4,400 LF) and associated metal window and door frames/components and metal roof components, as a greater than or equal to ( $\geq$ ) 50 parts per million (ppm) PCB waste.

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<sup>1</sup> Information was prepared by Woodard & Curran on behalf of Harvard to satisfy the requirements under 40 CFR §§ 761.61(a) and (c), and § 761.79(h). Information was submitted dated October, 2011 (SIP) and January 17, 2012 (e-mails on verification sampling and abatement protocols). These submittals together shall be referred to as the "Notification".

- Remove and dispose of certain *porous surfaces* (i.e. concrete and brick) in direct contact with PCB caulk at a RCRA hazardous waste landfill or TSCA permitted disposal facility, including the following:
  - Brick masonry adjacent to: exterior window joints (575 LF); exterior concrete joints (300 LF); interior partition window and door joints (550 LF); interior concrete joints (1,100 LF); and roof joints (75 LF).
  - Concrete masonry adjacent to: exterior window/door joints (1,100 LF); exterior brick joints (300 LF); interior partition window and door joints (450 LF); interior brick joints (1,100 LF); and roof joints (175 LF).
- Remove and dispose of PCB-contaminated ground surfaces with greater than (>) 1 ppm.

Harvard has determined that certain glazing and caulk located at the Site and containing PCB concentrations less than (<) 50 ppm meet the criteria for *Excluded PCB products* under § 761.3. Under the PCB regulations, *Excluded PCB products* are authorized for use. However, as indicated in the Notification, Harvard is proposing to remove these products in conjunction with the PCB work described in the Notification.

With the exception of the proposed verification sampling frequency for *porous surfaces* the Notification meets the requirements and standards established under §§ 761.61(a), 761.62, and 761.79 for cleanup and disposal of *PCB remediation waste* and *PCB bulk product waste*.

With respect to the verification sampling frequency, based on the results of the PCB sampling to-date and the proposed cleanup and disposal approach, EPA has determined that the proposed verification sampling frequencies, including both pre-removal and post-removal sampling, will be adequate to confirm that the PCB cleanup standard has been met. EPA finds that the activities proposed by Harvard will create no unreasonable risk when conducted in accordance with the Notification and this Approval. EPA may approve the sampling under § 761.61(c).

Harvard may proceed with its cleanup in accordance with 40 CFR §§ 761.61(a) and (c); § 761.62; § 761.79(h); its Notification; and this Approval, subject to the conditions of Attachment 1. Please note the following conditions in Attachment 1:

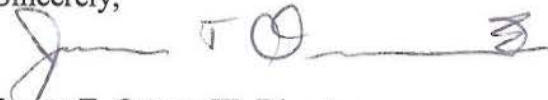
- Condition 1a. This condition requires submittal of the additional characterization sampling results for ground surfaces which is required to define the extent of the PCB contamination within these materials. The submittal should include Harvard's plan to clean up the PCB contamination in these materials.
- Condition 12.b. This condition requires notification to EPA in the event **any** verification sample exceeds the PCB cleanup standard of 1 ppm.

Questions and correspondence on this Approval should be directed to:

Kimberly N. Tisa, PCB Coordinator  
United States Environmental Protection Agency  
5 Post Office Square, Suite 100 (OSRR07-2)  
Boston, Massachusetts 02109-3912  
Telephone: (617) 918-1527  
Facsimile: (617) 918-0527

EPA shall not consider this project complete until it has received all submittals required under this Approval. Please be aware that upon EPA receipt and review of the submittals, EPA may request any additional information necessary to establish that the work has been completed in accordance with 40 CFR Part 761, the Notification, and this Approval.

Sincerely,

A handwritten signature in dark ink, appearing to read 'James T. Owens III', followed by a horizontal line and a stylized flourish.

James T. Owens III, Director  
Office of Site Remediation & Restoration

cc: J. Hamel, Woodard & Curran  
MassDEP - Boston  
File

Attachment 1



**ATTACHMENT 1:**

**PCB CLEANUP AND DISPOSAL APPROVAL CONDITIONS  
HARVARD LAW SCHOOL – POUND HALL  
1563 MASSACHUSETTS AVENUE (“the Site”)  
CAMBRIDGE, MASSACHUSETTS**

**GENERAL CONDITIONS**

1. This Approval is granted under the authority of Section 6(e) of the Toxic Substances Control Act (TSCA), 15 U.S.C. § 2605(e), and the PCB regulations at 40 CFR Part 761, and applies solely to the *PCB bulk product waste* and the *PCB remediation waste* located at the Site and identified in the Notification<sup>2</sup>.
  - a. The President and Fellows of Harvard College (Harvard) shall submit the results of the additional characterization sampling for ground surfaces to EPA for review and approval prior to initiating cleanup of the PCBs associated with these materials. A plan describing the cleanup, including disposal of the wastes, shall also be included. Harvard may submit this plan as a modification to the Notification in accordance with Condition 14 of this Approval.
2. Harvard shall conduct on-site activities in accordance with the conditions of this Approval and with the Notification.
3. In the event that the cleanup plan described in the Notification differs from the conditions specified in this Approval, the conditions of this Approval shall govern.
4. The terms and abbreviations used herein shall have the meanings as defined in 40 CFR § 761.3 unless otherwise defined within this Approval.
5. Harvard must comply with all applicable federal, state and local regulations in the storage, handling, and disposal of all PCB wastes, including PCBs, PCB Items and decontamination wastes generated under this Approval. In the event of a new spill during implementation of these cleanup activities, Harvard shall contact EPA within 24 hours for direction on PCB cleanup and sampling requirements.
6. Harvard is responsible for the actions of all officers, employees, agents, contractors, subcontractors, and others who are involved in activities conducted under this Approval. If at any time Harvard has or receives information indicating that Harvard or any other person has failed, or may have failed, to comply with any provision of this Approval, it must report the information to EPA in writing within 24 hours of having or receiving the information.

<sup>2</sup> Information was prepared by Woodard & Curran on behalf of Harvard to satisfy the requirements under 40 CFR §§ 761.61(a) and (c) and 761.79(h). Information was submitted dated October, 2011 (SIP) and January 17, 2012 (e-mails on verification sampling and abatement protocols). These submittals together shall be referred to as the “Notification”.

7. This Approval does not constitute a determination by EPA that the transporters or disposal facilities selected by Harvard are authorized to conduct the activities set forth in the Notification. Harvard is responsible for ensuring that its selected transporters and disposal facilities are authorized to conduct these activities in accordance with all applicable federal, state and local statutes and regulations.
8. This Approval does not: 1) waive or compromise EPA's enforcement and regulatory authority; 2) release Harvard from compliance with any applicable requirements of federal, state or local law; or 3) release Harvard from liability for, or otherwise resolve, any violations of federal, state or local law.

#### **NOTIFICATION AND CERTIFICATION CONDITIONS**

9. This Approval may be revoked if the EPA does not receive written notification from Harvard of its acceptance of the conditions of this Approval within 10 business days of receipt.
10. Harvard shall submit the following information for EPA review and/or approval:
  - a. a certification signed by its selected abatement contractor, stating that the contractor(s) has read and understands the Notification, and agrees to abide by the conditions specified in this Approval; and,
  - b. a contractor work plan, prepared and submitted by the selected demolition or abatement contractor(s) describing the containment and air monitoring that will be employed during abatement activities. This work plan should also include information on how and where wastes will be stored and disposed of, and on how field equipment will be decontaminated; and,
  - c. a certification signed by the selected analytical laboratory, stating that the laboratory has read and understands the sample extraction and analysis requirements, and the quality assurance requirements specified in the Notification and in this Approval.

#### **CLEANUP AND DISPOSAL CONDITIONS**

11. To the maximum extent practical, engineering controls, such as barriers, and removal techniques, such as the use of HEPA ventilated tools, shall be utilized during removal processes. In addition, to the maximum extent possible, disposable equipment and materials, including PPE, will be used to reduce the amount of decontamination necessary.



12. PCB-contaminated materials shall be removed and/or decontaminated, and verification sampling and analysis shall be conducted as described below:
- a. All visible PCB caulk shall be removed and PCB-contaminated *porous surfaces* (e.g. concrete and brick) shall be removed as described in the Notification.
  - b. The PCB decontamination standard for *porous surfaces* (i.e. concrete and brick) shall be less than or equal to ( $\leq$ ) 1 part per million (ppm).
    - i) All verification sampling for *porous surfaces* shall be performed on a bulk basis (i.e., mg/kg) and reported on a dry weight analysis. Verification sampling for *porous surfaces* shall be conducted in accordance with the EPA Region 1 *Standard Operating Procedure for Sampling Porous Surfaces for Polychlorinated Biphenyls (PCBs) Revision 4, May 5, 2011*, at a maximum depth interval of 0.5 inches, and with the frequency described in the Notification to confirm that all greater than ( $>$ ) 1 ppm PCB-contaminated *porous surfaces* have been removed.
    - ii) Chemical extraction for PCBs shall be conducted using Method 3500B/3540C of SW-846 and chemical analysis for PCBs shall be conducted using Method 8082 of SW-846, unless another method(s) is validated according to Subpart Q.
    - iii) In the event any verification sampling result is  $> 1$  ppm, Harvard shall contact EPA for a determination on the appropriate verification sampling frequency for the remaining surfaces.
  - c. The PCB decontamination standard for ground surfaces (e.g., soils, concrete, asphalt) shall be  $\leq 1$  ppm.
    - i) *Bulk PCB remediation waste* samples (e.g., soils) shall be collected on a bulk basis (i.e. mg/Kg) and PCB analytical results shall be reported on a dry weight analysis.
    - ii) *Porous surface* sampling shall be performed on a bulk basis (i.e. mg/Kg). Samples shall be conducted in accordance with the EPA Region 1 *Standard Operating Procedure for Sampling Porous Surfaces for Polychlorinated Biphenyls (PCBs) Revision 4, May 5, 2011*, at a maximum depth interval of 0.5 inches
    - iii) Chemical extraction for PCBs shall be conducted using Method 3500B/3540C of SW-846 and chemical analysis for PCBs shall be conducted using Method 8082 of SW-846, unless another method(s) is validated according to Subpart Q.

13. PCB waste (at any concentration) generated as a result of the activities described in the Notification, excluding any decontaminated materials, shall be marked in accordance with 40 CFR § 761.40; stored in a manner consistent with 40 CFR § 761.65; and, disposed of in accordance with 40 CFR § 761.61 or § 761.62, unless otherwise specified below.
  - a. Decontamination wastes and residues shall be disposed of in accordance with 40 CFR § 761.79(g)(6).
  - b. Moveable equipment, tools, and sampling equipment shall be decontaminated in accordance with either 40 CFR § 761.79(b)(3)(i)(A), § 761.79(b)(3)(ii)(A), or § 761.79(c)(2).
  - c. PCB-contaminated water generated during decontamination shall be decontaminated in accordance with 40 CFR § 761.79(b)(1) or disposed of under § 761.60.

#### **INSPECTION, MONITORING, MODIFICATION AND REVOCATION CONDITIONS**

14. Any proposed modification(s) in the plan, specifications, or information in the Notification must be submitted to EPA no less than 14 calendar days prior to the proposed implementation of the change. Such proposed modifications will be subject to the procedures of 40 CFR § 761.61(a)(3)(ii).
15. Any departure from the conditions of this Approval without prior, written authorization from the EPA may result in the revocation, suspension and/or modification of the Approval, in addition to any other legal or equitable relief or remedy the EPA may choose to pursue.
16. Any misrepresentation or omission of any material fact in the Notification or in any records or reports may result in the EPA's revocation, suspension and/or modification of the Approval, in addition to any other legal or equitable relief or remedy the EPA may choose to pursue.
17. Approval for these activities may be revoked, modified or otherwise altered: if EPA finds a violation of the conditions of this Approval or of 40 CFR Part 761, including EPA's PCB Spill Cleanup Policy, or other applicable rules and regulations; if EPA finds that these activities present an unreasonable risk to public health or the environment; or if EPA finds that there is migration of PCBs from the Site. Harvard may apply for appropriate modifications in the event new rules, standards, or guidance comes into effect.



18. Harvard shall allow any authorized representative of the Administrator of the EPA to inspect the Site and to inspect records and take samples as may be necessary to determine compliance with the PCB regulations and this Approval. Any refusal by Harvard to allow such an inspection (as authorized by Section 11 of TSCA) shall be grounds for revocation of this Approval.

#### **RECORDKEEPING AND REPORTING CONDITIONS**

19. Harvard shall prepare and maintain all records and documents required by 40 CFR Part 761, including but not limited to the records required under Subparts J and K. A written record of the decontamination and the analytical sampling shall be established and maintained by Harvard in one centralized location, until such time as EPA approves in writing a request for an alternative disposition of such records. All records shall be made available for inspection to authorized representatives of EPA.
20. Harvard shall submit a Final Completion Report (Report) to the EPA within 120 days of completion of the activities described under this Approval. At a minimum, this Report shall include: a discussion of the project activities, including any modifications that were made to the cleanup plan; characterization and post-abatement sampling analytical results; copies of the accompanying analytical chains of custody; field and laboratory quality control/quality assurance checks; an estimate of the quantity of PCBs removed and disposed off-site; copies of manifests and/or bills of lading; and, copies of certificates of disposal or similar certifications issued by the disposer, if applicable.
21. Required submittals shall be mailed to:
- Kimberly N. Tisa, PCB Coordinator  
United States Environmental Protection Agency  
5 Post Office Square, Suite 100 (OSRR07-2)  
Boston, Massachusetts 02109-3912  
Telephone: (617) 918-1527  
Facsimile: (617) 918-0527
22. No record, report or communication required under this Approval shall qualify as a self-audit or voluntary disclosure under EPA audit, self-disclosure or penalty policies.

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**END OF ATTACHMENT 1**